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## Standard Model Extended by a Heavy Singlet: Linear vs. Nonlinear EFT

*Thursday, July 6, 2017 3:00 PM (15 minutes)*

I consider the Standard Model extended by a heavy scalar singlet and derive the low-energy effective theory resulting from integrating out the heavy state. This exercise in effective field theory serves to illustrate with a simple example the systematics of the linear and nonlinear electroweak effective Lagrangians and to clarify the relation between them. I discuss power-counting aspects and the transition between both effective theories on the basis of the model.

### Experimental Collaboration

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